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Certificate of Authorization No. E-00001307

December 20, 2005

Ms. Sandee Stolowski  
CGI Adjusters  
300 Burnett Street  
Ft. Worth TX 76102

For  
AeroHead Insurance Company

Re:           Claim No: 2005-200-442  
              Insured: Hubert Smith  
              Subject: Report of Findings  
              RCG File No: 5222124

Dear Ms. Sandee Stolowski

Mr. Hubert Smith reported that his single family dwelling was heavily damaged by Hurricane Katrina on August 29, 2005. The single family dwelling was located at 61 Bayou Circle in Gulfport MS 39507.

Rimkus Consulting Group, Inc. was retained by yourself Ms. Sandee Stolowski on behalf of CGI Adjusting firm for AeroHead/Clarenton Insurance Company.

We were specifically asked to determine what damages were caused by STORM SURGE and what damages were caused by WIND.

Mr. James Overstreet P.E. performed our visual inspection of the property on Saturday December 1<sup>st</sup>, 2005. Mr. Hubert and his wife were present for the inspection. Weather data used during our evaluation was obtained; included data from Compu-Weather, Inc. and the National Oceanic and Atmospheric Administration (NOAA).

## CONCLUSIONS

The following conclusions were made after our site visit and a review of the field notes and photographs. Our opinions are as follows :

1. There was evidence that the dwelling had racked in that several posts were leaning, several doors would not close properly, and some of the footings had bulged out of the ground.
2. There was evidence of 25' of storm surge as indicated by waterlines on neighboring property, and the fact that everything thru the 2<sup>nd</sup> story had been replaced.

## INTRODUCTION

Hurricane Katrina was one of the strongest storms to impact the coast of the United States during the last 100 years. After crossing South Florida and entering the Gulf of Mexico Katrina began to strengthen reaching category 5 strength hurricane and on August 28, 2005, about 250 miles south-southeast of the mouth of the Mississippi River Katrina's winds reached their peak intensity of 175 mph winds and the pressure fell to 902 mb.

According to published weather data, the highest wind gusts measured along the Mississippi coast on August 29, 2005, were 90 mph at a Keesler AFB in Biloxi, 63 mph in Gulfport, and 50 mph at Pascagoula. Winds as high as 125 mph likely occurred near the point of landfall near the Louisiana/Mississippi border, and winds likely in excess of 100 mph occurred along the entire Mississippi coast. Preliminary data from NOAA estimated winds in the Gulfport area to be 100 to 130 mph.

Following the wind forces, a storm surge from the hurricane produced wide-spread damage from water forces and water contamination. Along the Mississippi coast, there were reported storm surges of 11.27 feet at Green Pass, 12.16 feet at Pascagoula, 26 feet at the Biloxi River at Wortham, and a report of 30 feet above sea level at many places in Hancock County.

## OBSERVATIONS

Description of property : The residence was observed to be a 3-story wood frame dwelling. The foundation was a concrete slab on grade with the second and third story constructed on top of stilts. The exterior walls were covered with vinyl siding. The roof consisted of shingles. For purposes of this report, the front of the residence was reported to face South East 120deg heading.

During the course of our site visit, we observed the following:

- Much of the damage and debris had been removed at the time of the visit. The inspection consisted of a tour guided by Mr. Hubert Smith and his wife. The bottom 2 stories had all the water damaged drywall and electrical fixtures removed and replaced at the time of the inspection. The top or 3<sup>rd</sup> story remained undamaged and livable.
- There was storm surge evidence on the second story of neighboring homes. ( See Photo )



- There were several posts which were split with paint and caulk in them. While others appear to be recently split. A great number of the supporting posts were found to be out of plum when a level was placed on them. Some of them were severely out of plum. Virtually all supporting columns or posts on the SE corner of the dwelling were found to be leaning to the north and west which the direction the winds had blown. ( See Photo )
- Additionally, due to overwhelming evidence of structural racking, Mr. Smith had taken it upon himself to hire a contractor to make structural repairs. ( See Photo )
- On the northeast portion of the dwelling, there were several supporting columns or posts, which appear to have bulged upward to the extent that a mound was evident. ( See Photo ). Additionally, a level was placed on a several columns on the NE portion of the dwelling and they were found to be leaning severely to the east.
- There were several windows on the east side, which had been blown in by winds inward by winds out of the east. ( See Photo ).
- Mr. Hubert Smith M.D. stated that he would accept \$150k as compensation for his expenses in making the structural repairs necessary to prevent the building from collapsing.
- The front door to the dwelling would not open and close properly due to structural racking.
- A door on the 3<sup>rd</sup> story would not open and close properly due to structural racking.
- A portion of the roof awning over the front door had been blown away from winds out of the south.

## ANALYSIS

The storm surge damage had been repaired at Mr. Smith's expense. Additionally, Mr Smith had taken it upon himself to attempt structural repairs at his expense. There was extensive structural damage to the dwelling in the form of split posts and posts which were leaning. The posts on the NW corner of the dwelling were found to be leaning to the NW which was the direction the winds had blown. The posts on the SE corner or opposite corner were found to be leaning to the SE which was puzzling due to the fact that this was the directing the winds had blown from. The posts in this area were found to have bulges where the footings were. This could be explained by the fact that the winds out of the east would have racked the entire structure to the west and simply lifted the footings up. I could not explain why the posts were found to be leaning to the SE unless the winds out of the SW which occurred after the winds out of the east impacted the dwelling forcing it back to the east. The fact that the awning on the east side over the front door was blown off ,indicates that winds occurred from this direction.

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The evidence of doors which would not open and close properly indicates the entire structure had racked.

This report was prepared for the exclusive use of CGI Adjusters for the benefit of AeroHead/Clarenton Insurance Company, and was not intended for any other purpose.

Our report was based on information made available to us at the time. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions, and to revise our opinions and conclusions if necessary and warranted. Photographs taken during our work are retained in our files and are available to you upon request. This report was prepared for our client's use, and we disavow any liability for use by others.

Thank you for allowing us to provide this service. If you have any questions or need additional assistance, please call.

Sincerely,

RIMKUS CONSULTING GROUP, INC.

James Overstreet P.E.  
Consultant

Corey D. Green P.E.  
MS Reg. Eng. No. 14873  
Senior Consultant

Attachments: Photographs ( Ref 4381-4467 )